



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,223	10/16/2003	Stephen G. Dick	I-2-0427.1US	9473
24374	7590	09/27/2007	EXAMINER	
VOLPE AND KOENIG, P.C. DEPT. ICC UNITED PLAZA, SUITE 1600 30 SOUTH 17TH STREET PHILADELPHIA, PA 19103			ALAM, FAYYAZ	
			ART UNIT	PAPER NUMBER
			2618	
			MAIL DATE	DELIVERY MODE
			09/27/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/688,223	DICK ET AL.
	Examiner	Art Unit
	Fayyaz Alam	2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 30 July 2007.  
 2a) This action is FINAL.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1 - 38 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1 - 38 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____	6) <input type="checkbox"/> Other: _____

## DETAILED ACTION

This action is in response to applicant's amendment/arguments filed on 7/30/2007. **This action is made Non-FINAL.**

### *Response to Arguments*

Applicant's arguments, see pgs. 17 - 19, filed 7/30/2007, with respect to the rejection(s) of claim(s) 1 - 7, 13 - 15, 21 - 26, 29, and 31 - 34 under Willenegger have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of **Dominique et al. (USPN 6,400,960)**.

Therefore the rejection of claims 1 - 38 still stands. Please see rejected independent claims 1, 12, 16, 20, 31, and 35.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**Claims 1 - 7, 13 - 16, 21 - 26, 29, and 31 - 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Willenegger et al. (PCT Publication # WO02/065667) further in view of Dominique et al. (USPN 6,400,960).**

Consider **claims 1 and 20**, Willenegger et al. disclose a wireless communication system (see fig. 1) and a method for having outer loop transmission power control (see abstract) in which user data is signaled in both shared channels available to unspecified wireless transmit receive units and dedicated channels that are assigned for use by a specific WTRU in which the WTRU transmits data signals on an uplink dedicated channel and sporadically transmits data signals on an associated uplink shared channel, the communication system comprising (note: the invention as disclosed in the

prior art is for downlink power control and is also applicable to uplink power control as stated in the specification; see pg. 7 lines 20 - 33; pg. 12, lines 22 - 27):

a base station (104) (read as network unit) including:

a receiver for receiving UL user data from user terminals (106) (read as WTRUs) on UL DCHs and at least one UL SCH (since a base station would inherently have a receiver and transmitter for communications with user terminals and as disclosed the two communication channels are DCH and SCH associated with a particular user terminal; see pg. 7, lines 20 - 33; pg. 12, lines 22 - 27; fig. 1); and

a processor for computing target metric or signal quality for UL DCHs based on the reception of signals transmitted by a WTRU on an UL DCH associated with an UL SCH usable by the WTRU (since power control for downlink channels is disclosed as an example but the invention can be applied to uplink power control (see p. 12, lines 22- 27) where a base station or a network unit would compute the target metric instead of the user terminal for uplink power control (see pg. 8, lines 25 - 29));

a shared channel target metric generator configured to output a respective UL SCH target metric derived from computed UL DCH target metric (since power control according to the prior art is done independently on each channel (see pg. 8, lines 21 - 24) by a base station (104) based on signal quality measurement or target metric computation of the channel associated with the channel to be power controlled (see pg. 8, lines 29 - 33)); and

user terminals (106) (read as WTRUs), each including:

a processor which computes transmit power adjustments as a function of target metrics for UL channels and said processor configured to compute UL DCH power adjustments for an UL DCH associated with an UL SCH as a function of UL DCH target metrics computed by said network unit based on the reception of signals transmitted by the WTRU on the UL DCH (since in the downlink power control, the base station computes the transmit power based on the TPC command transmitted by the user terminals (see pg. 10, lines 1 - 7) which are based on the estimated or computed signal-to-interference-plus-noise ratio or SNR, therefore, mapping the process to uplink power control, the user terminals would compute transmit power based on TPC commands from the base station (see pg. 8, lines 20 - 36; pg. 10, lines 1 - 7)); and

said processor configured to compute UL SCH power adjustments for the associated UL SCH as a functions of the respective UL SCH target metrics output from the shared channel target metric generator (since individual power control is disclosed and the transmit power of the SCH would depend on the TPC commands from the base station or network unit, where, target metric or SNR is computed from the DCH target metric or SNR (see pg. 8, lines 21 - 36; pg. 10, lines 1 - 17)); and

a transmitter operatively associated with said WTRU's processor for transmitting user data on the UL DCH and associated UL SCH at respective power levels corresponding to respective computed UL DCH and UL SCH power

adjustments (since a transmitted is inherent in a user terminal (104) and after the power control has taken the user terminals would inherently transmit at the newly discovered power levels through a given channel, i.e. DCH and SCH (see fig. 1, pg. 10, lines 1 - 7).

However, Willenegger discloses all the limitations but does not explicitly disclose a shared channel target metric generator configured to output a respective UL SCH target metric derived from a target metric computed for the UL DCH associated with the UL SCH.

In the related field of endeavor, Dominique discloses a shared channel target metric generator (inherently) configured to output a respective updated power threshold for secondary channel (read as UL SCH target metric) derived from a current established power threshold level for associated primary channel (read as target metric computed for the UL DCH associated with the UL SCH) (see col. 8, lines 44 - 58).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Willenegger with the teachings of Dominique in order to provide power control in a given during channel during times of discontinuous transmission.

Consider **claims 2 and 21** as applied to claims 1 and 20, Willenegger et al. disclose base station (104) (read as network unit) includes shared channel target metric generator (since shared channel target metric is generated in the user terminal for the downlink, therefore, it would be generated in the base station for the uplink power

control since the invention disclosed in the prior art is applicable to uplink power control (see pg. 8, lines 19 - 36; pg. 12, lines 22 - 27; fig. 1).

Consider **claims 3 and 22** as applied to claims 2 and 21, Willenegger et al. disclose target metrics are signal-to-noise-plus-interference ratios or SNR (read as SIR) and the communication system has open loop transmission power control for WTRU transmissions wherein: said base station (104) (read as network unit) includes a transmitter configured to transmit TPC commands that are indicative of DCH and SCH target SNRs (read as SIRs) (see pg. 10, lines 1 - 7); and said user terminals (106) (read as WTRUs) each include a receiver configured to receive respective DCH and SCH target SNRs (read as SIRs) such that the user terminal's (read as WTRU's) processor computes transmit power (read as power adjustments) based on the received TPC command that are indicative of the DCH and SCH target SNRs (read as SIRs) (see pg. 10, lines 1 - 17; fig. 1).

Consider **claims 4 and 23** as applied to claims 2 and 21, Willenegger et al. disclose target metrics are signal-to-noise-plus-interference ratios or SNR (read as SIR) and the communication system has closed loop transmission power control for WTRU transmissions wherein: said base station (104) (read as network unit) includes: a component configured to produce TPC commands (read as DCH and SCH power step commands) based on the DCH and SCH target SNRs (read as SIRs); and transmitter configured to transmit TPC commands (read as DCH and SCH power step commands); and said user terminals (106) (read as WTRUs) each include a receiver configured to receive respective TPC commands (read as DCH and SCH power step commands)

such that the user terminal's (read as WTRU's) processor computes transmit power (read power adjustments) based on the received TPC commands (read as DCH and SCH power step commands) (see pg. 8, lines 19 - 36; pg. 10, lines 1 - 17).

Consider **claims 5, 13, 24, 29, and 32** as applied to claims 2, 12, 21, 27, and 31 Willenegger et al. disclose the target metrics are target signal-to-noise-plus-interference ratios or SNRs (read as SIRs) and the communication system is a Universal Mobile Telecommunications System or UMTS (since the invention as disclosed in the prior art is applicable to other standards as well; see pg. 8, lines 19 - 21; pg. 12, lines 24 - 27).

Consider **claims 6, 14, 25, and 33** as applied to claims 5, 13, 24, and 32 Willenegger et al. disclose the UMTS has open loop transmission power control for WTRU transmissions and the SCHs for which SCH target SNRs (read as SIRs) are generated are for high data rate packet transmission (read as High Speed Shared Information Channels) which operate in conjunction with High Speed Downlink Shared Channels wherein (see pg. 7, lines 26 - 28): said base station (104) (read as network unit) is a UMTS Terrestrial Radio Access Network that includes a transmitter configured to transmit TPC commands that are indicative of DCH and HS-SICH target SNRs (read as SIRs) (see pg. 10, lines 1 - 7); and said user terminals (106) (read as WTRUs) each include a receiver configured to receive respective DCH and HS-SISCH target SNRs (read as SIRs) such that the user terminal's (read as WTRU's) processor computes transmit power (read as power adjustments) based on the received TPC command that are indicative of the DCH and HS-SICH target SNRs (read as SIRs) (see pg. 10, lines 1 - 17; fig. 1).

Consider **claims 7, 15, 26, and 34** as applied to claims 5, 13, 24, and 32

Willenegger et al. disclose the UMTS has open loop transmission power control for WTRU transmissions and the SCHs for which SCH target SNRs (read as SIRs) are generated are for high data rate packet transmission (read as High Speed Shared Information Channels) which operate in conjunction with High Speed Downlink Shared Channels wherein (see pg. 7, lines 26 - 28): said base station (104) (read as network unit) UMTS Terrestrial Radio Access Network that includes: a component configured to produce TPC commands (read as DCH and HS-SISCH power step commands) based on the DCH and HS-SISCH target SNRs (read as SIRs); and transmitter configured to transmit TPC commands (read as DCH and HS-SICH power step commands); and said user terminals (106) (read as WTRUs) each include a receiver configured to receive respective TPC commands (read as DCH and HS-SICH power step commands) such that the user terminal's (read as WTRU's) processor computes transmit power (read power adjustments) based on the received TPC commands (read as DCH and HS-SICH power step commands) (see pg. 8, lines 19 - 36; pg. 10, lines 1 - 17).

Consider **claims 12 and 31**, Willenegger et al. disclose a base station (104) (read as serving wireless transmit receive unit) and a method for implementing transmission power control for user terminals (106) (read as other WTRUs) where user data is signaled to the base station (104) (read as serving WTRU) by the user terminals (106) (read as other WTRUs) in both uplink shared channels available to unspecified user terminals (106) (read as WTRUs) and dedicated UL channels that are assigned for use by a specific user terminal (106) (read as WTRU) in which the specific user terminal

(106) transmits data signals on an uplink dedicated channel and sporadically transmits data signals on an associated uplink shared channel (note: the invention as disclosed in the prior art is for downlink power control and is also applicable to uplink power control as stated in the specification; see pg. 7 lines 20 - 33; pg. 12, lines 22 - 27) and where the user terminals (106) (read as other WTRUs) each include a processor which computes transmit power adjustments as a function of target metrics for UL channels and said processor configured to compute UL DCH power adjustments for an UL DCH associated with an UL SCH as a function of UL target metrics computed by base station (104) (read as serving WTRU) (since in the downlink power control, the base station computes the transmit power based on the TPC command transmitted by the user terminals (see pg. 10, lines 1 - 7) which are based on the estimated or computed signal-to-interference-plus-noise ratio or SNR, therefore, mapping the process to uplink power control, the user terminals would compute transmit power based on TPC commands from the base station (see pg. 8, lines 20 - 36; pg. 10, lines 1 - 7)); and said processor configured to compute UL SCH power adjustments for the associated UL SCH as a function of UL target metrics computed by the base station (104) (read as serving WTRU) (since individual power control is disclosed and the transmit power of the SCH would depend on the TPC commands from the base station or network unit, where, target metric or SNR is computed from the DCH target metric or SNR (see pg. 8, lines 21 - 36; pg. 10, lines 1 - 17)), the base station (104) (read as serving WTRU) comprising:

a receiver for receiving UL user data from user terminals (106) (read as WTRUs) on UL DCHs and at least one UL SCH (since a base station would inherently have a receiver and transmitter for communications with user terminals and as disclosed the two communication channels are DCH and SCH associated with a particular user terminal; see pg. 7, lines 20 - 33; pg. 12, lines 22 - 27; fig. 1); and

a processor for computing target metric or signal quality for UL DCHs based on the reception of signals transmitted by a WTRU on an UL DCH associated with an UL SCH usable by the WTRU (since power control for downlink channels is disclosed as an example but the invention can be applied to uplink power control (see p. 12, lines 22-27) where a base station or a network unit would compute the target metric instead of the user terminal for uplink power control (see pg. 8, lines 25 - 29));

a shared channel target metric generator configured to output a respective UL SCH target metric derived from computed UL DCH target metric (since power control according to the prior art is done independently on each channel (see pg. 8, lines 21 - 24) by a base station (104) based on signal quality measurement or target metric computation of the channel associated with the channel to be power controlled (see pg. 8, lines 29 - 33)).

However, Willenegger discloses all the limitations but does not explicitly disclose a shared channel target metric generator configured to output a respective UL SCH target metric derived from a target metric computed for the UL DCH associated with the UL SCH.

In the related field of endeavor, Dominique discloses a shared channel target metric generator (inherently) configured to output a respective updated power threshold for secondary channel (read as UL SCH target metric) derived from a current established power threshold level for associated primary channel (read as target metric computed for the UL DCH associated with the UL SCH) (see col. 8, lines 44 - 58).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Willenegger with the teachings of Dominique in order to provide power control in a given during channel during times of discontinuous transmission.

Consider **claims 16 and 35**, Willenegger et al. disclose a wireless communication system (see fig. 1) and method of having outer loop transmission power control (see abstract) in which user data is signaled in both shared channels available to unspecified wireless transmit receive units and dedicated channels that are assigned for use by a specific WTRU in which the WTRU transmits data signals on an uplink dedicated channel and sporadically transmits data signals on an associated uplink shared channel, the user terminal (106) (read as WTRU) comprising (note: the invention as disclosed in the prior art is for downlink power control and is also applicable to uplink power control as stated in the specification; see pg. 7 lines 20 - 33; pg. 12, lines 22 - 27): user terminal (106) (read as WTRU) include a receiver configured to receive DCH target SNRs (read as target metric) such that the user terminal's (read as WTRU's) processor computes transmit power (read as power adjustments) based on the received

TPC command that are indicative of the DCH and SCH target SNRs (read as SIRs) (see pg. 10, lines 1 - 17; fig. 1).

However, Willenegger discloses all the limitations but does not explicitly disclose a shared channel target metric generator configured to output a respective UL SCH target metric derived from a target metric computed for the UL DCH associated with the UL SCH.

In the related field of endeavor, Dominique discloses a shared channel target metric generator (inherently) configured to output a respective updated power threshold for secondary channel (read as UL SCH target metric) derived from a current established power threshold level for associated primary channel (read as target metric computed for the UL DCH associated with the UL SCH) (see col. 8, lines 44 - 58).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Willenegger with the teachings of Dominique in order to provide power control in a given during channel during times of discontinuous transmission.

**Claims 8 - 11, 17 - 19, 27 - 28, 30, and 36 - 38** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Willenegger et al. (PCT Publication # WO 02/065667)** in view of **Dominique et al. (USPN 6,400,960)** and further in view of **Iwamura (U.S. Patent # 6,853,844)**.

Consider **claims 8 and 27** as applied to claims 1 and 20, Willenegger et al. fail to disclose WTRUs each includes a shared channel target metric generator.

In the related field of endeavor, Iwamura discloses mobile station measuring reception quality (read as target metric) of second signal or shared channel signal (read as shared channel target metric generator) (see col. 5, lines 49 - 65; col. 6, lines 21 - 26).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Willenegger et al. with the teachings of Iwamura in order to improve power utilization efficiency in a mobile communication system.

Consider **claims 9 and 28** as applied to claims 8 and 27, Willenegger et al. disclose target metrics are signal-to-noise-plus-interference ratios or SNR (read as SIR) and the communication system has open loop transmission power control for WTRU transmissions wherein: said base station (104) (read as network unit) includes a transmitter configured to transmit TPC commands that are indicative of DCH target SNRs (read as SIRs) (see pg. 10, lines 1 - 7); and said user terminals (106) (read as WTRUs) each include a receiver configured to receive respective DCH target SNRs (read as SIRs) such that the user terminal's (read as WTRU's) processor computes transmit power (read as power adjustments) based on the received TPC command that are indicative of the DCH and SCH target SNRs (read as SIRs) (see pg. 10, lines 1 - 17; fig. 1).

However, Willenegger et al. fail to disclose SCH target SIRs generated by the WTRU's shared channel target metric generator based on received DCH target SIRs.

In the related field of endeavor, Iwamura discloses measuring reception quality of the SCH and generating SIRs at the mobile stations (read as WTRUs) based on DCH target SIRs (read as disclose SCH target SIRs generated by the WTRU's shared channel target metric generator based on received DCH target SIRs) (see col. 2, lines 1 - 2; col. 3, lines 33 - 35; col. 5, lines 49 - 65; col. 6, lines 21 - 25).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Willenegger et al. with the teachings of Iwamura in order to improve power utilization efficiency in a mobile communication system.

Consider **claim 10** as applied to claim 8, Willenegger et al. disclose the target metrics are target signal-to-noise-plus-interference ratios or SNRs (read as SIRs) and the SCHs for which SCH target SIRs are generated are high rate packet data transmissions (read as High Speed Shared Information Channels (HS-SICHs)) which operate in conjunction with High Speed Downlink Shared Channels (HS-DSCHs); see pg. 8, lines 19.- 21; pg. 7, lines 26 - 28).

Consider **claims 11 and 30** as applied to claims 10 and 29, Willenegger et al. disclose the UMTS has open loop transmission power control for WTRU transmissions and the SCHs for which SCH target SNRs (read as SIRs) are generated are for high data rate packet transmission (read as High Speed Shared Information Channels) which operate in conjunction with High Speed Downlink Shared Channels wherein (see pg. 7, lines 26 - 28): said base station (104) (read as network unit) is a UMTS Terrestrial Radio Access Network that includes a transmitter configured to transmit TPC

commands that are indicative of DCH target SNRs (read as SIRs) (see pg. 10, lines 1 - 7); and said user terminals (106) (read as WTRUs) each include a receiver configured to receive respective DCH target SNRs (read as SIRs) such that the user terminal's (read as WTRU's) processor computes transmit power (read as power adjustments) based on the received TPC command that are indicative of the DCH and HS-SICH target SNRs (read as SIRs) (see pg. 10, lines 1 - 17; fig. 1).

However, Willenegger et al. fail to disclose HS-SICH target SIRs are generated by the WTRU's shared channel target metric generator based on received DCH target SIRs.

In the related field of endeavor, Iwamura discloses measuring reception quality of the SCH and generating SIRs at the mobile stations (read as WTRUs) based on DCH target SIRs (read as disclose SCH target SIRs generated by the WTRU's shared channel target metric generator based on received DCH target SIRs) (see col. 2, lines 1 - 2; col. 3, lines 33 - 35; col. 5, lines 49 - 65; col. 6, lines 21 - 25).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Willenegger et al. with the teachings of Iwamura in order to improve power utilization efficiency in a mobile communication system.

Consider **claim 17 and 36** as applied to claims 16 and 35, Willenegger et al. disclose Willenegger et al. disclose target metrics are signal-to-noise-plus-interference ratios or SNR (read as SIR) and user terminal's (read as WTRU's) processor computes transmit power (read as power adjustments) based on the received TPC command that

are indicative of the DCH and SCH target SNRs (read as SIRs) (see pg. 10, lines 1 - 17; fig. 1) and said processor is operatively associated with a transmitter having a combiner configured to combine the computed UL DCH power adjustments with the UL DCH transmission data signals for transmission by the WTRU and a combiner configured to combine the computed UL SCH power adjustments with the UL SCH transmission data signals for transmission by the WTRU (since in fig. 6, data frames are shown to have TPC or transmit power control bits and data bits together in one frame therefore there must be a means for combining the data transmission with the target metrics).

However, Willenegger et al. fail to disclose SCH target SIRs generated by the WTRU's shared channel target metric generator based on received DCH target SIRs.

In the related field of endeavor, Iwamura discloses measuring reception quality of the SCH and generating SIRs at the mobile stations (read as WTRUs) based on DCH target SIRs (read as disclose SCH target SIRs generated by the WTRU's shared channel target metric generator based on received DCH target SIRs) (see col. 2, lines 1 - 2; col. 3, lines 33 - 35; col. 5, lines 49 - 65; col. 6, lines 21 - 25).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Willenegger et al. with the teachings of Iwamura in order to improve power utilization efficiency in a mobile communication system.

Consider **claims 18 and 37** as applied to claims 16 and 35, Willenegger et al. disclose the target metrics are target signal-to-noise-plus-interference ratios or SNRs (read as SIRs) and the communication system is a Universal Mobile

Telecommunications System or UMTS that has open loop transmission power control for user terminals (since the invention as disclosed in the prior art is applicable to other standards as well; see pg. 8, lines 19 - 21; pg. 12, lines 24 - 27; fog. 3).

Consider **claims 19 and 38** as applied to claims 18 and 37, Willenegger et al. disclose the SCHs for which SCH target SNRs (read as SIRs) are generated are high rate packet data transmission (read as High Speed Shared Information Channels; see pg. 7, lines 26 - 28) which operate in conjunction with High Speed Downlink Shared Channels, wherein said processor computes transmit power (read power adjustments) based on the received TPC commands (read as DCH and HS-SICH target SIRs) (see pg. 8, lines 19 - 36; pg. 10, lines 1 - 17) and said processor is operatively associated with a transmitter having a combiner configured to combine the computed UL DCH power adjustments with the UL DCH transmission data signals for transmission by the WTRU and a combiner configured to combine the computed UL HS-SICH power adjustments with the UL HS-SICH transmission data signals for transmission by the WTRU (since in fig. 6, data frames are shown to have TPC or transmit power control bits and data bits together in one frame therefore there must be a means for combining the data transmission with the target metrics).

However, Willenegger et al. fail to disclose SCH target SIRs generated by the WTRU's shared channel target metric generator based on received DCH target SIRs.

In the related field of endeavor, Iwamura discloses measuring reception quality of the SCH and generating SIRs at the mobile stations (read as WTRUs) based on DCH target SIRs (read as disclose SCH target SIRs generated by the WTRU's shared

channel target metric generator based on received DCH target SIRs) (see col. 2, lines 1 - 2; col. 3, lines 33 - 35; col. 5, lines 49 - 65; col. 6, lines 21 - 25).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Willenegger et al. with the teachings of Iwamura in order to improve power utilization efficiency in a mobile communication system.

### ***Conclusion***

Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Hand-delivered responses** should be brought to

Customer Service Window  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Fayyaz Alam whose telephone number is (571) 270-1102. The Examiner can normally be reached on Monday-Friday from 9:30am to 7:00pm.

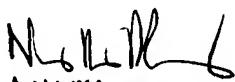
If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Nay Maung can be reached on (571) 272-7882. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

*Fayyaz Alam*

September 19, 2007

  
NAY MAUNG  
SUPERVISORY PATENT EXAMINER